



FIG. 1a

Sequence #1: AGCGTA

Primer 3016 Da	Extension Products	Mass (Da)
—	agcgta	4878.2
—	agcgt	4565.0
—	agcg	4260.8**
—	agc	3931.6
—	ag	3642.4*
—	a	3313.2

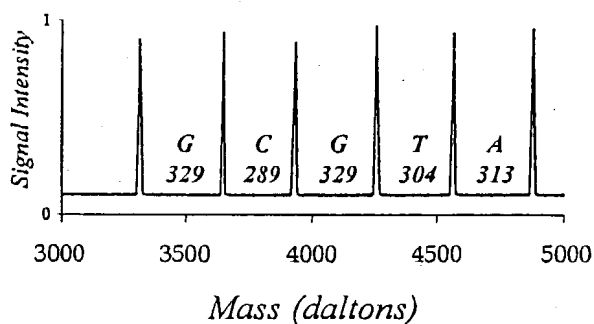


FIG. 1b

Sequence #2: GATCCT

Primer 3016 Da	Extension Products	Mass (Da)
—	gagcct	4854.2
—	gagcc	4550.0
—	gagc	4260.8**
—	gag	3971.6
—	ga	3642.4*
—	g	3329.2

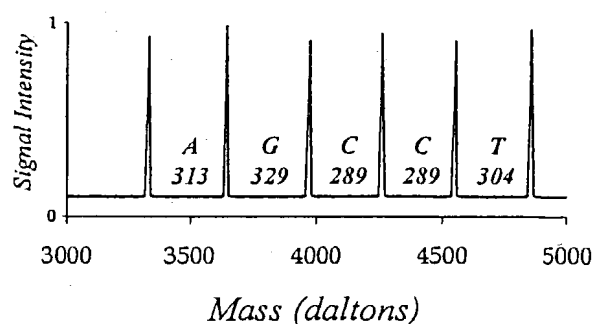


FIG. 1c

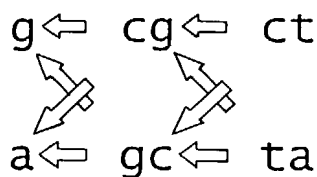
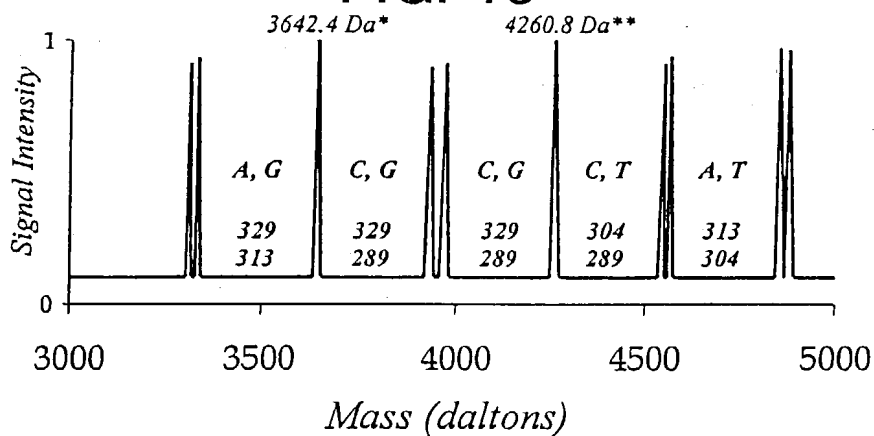


FIG. 1d

gcgct
GCGTA
ggcct
ggcta
acgct
acgta
AGCCT
agcta

FIG. 1e

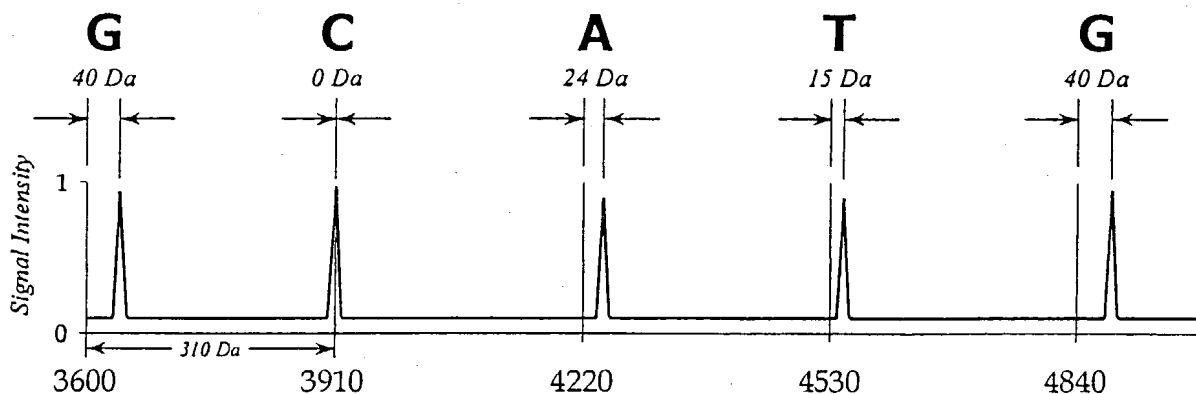


Nucleotide Mass (Da)

ddN 310
ddC 273
ddT 288
ddA 297
ddG 313

Sequence #1: GCATG

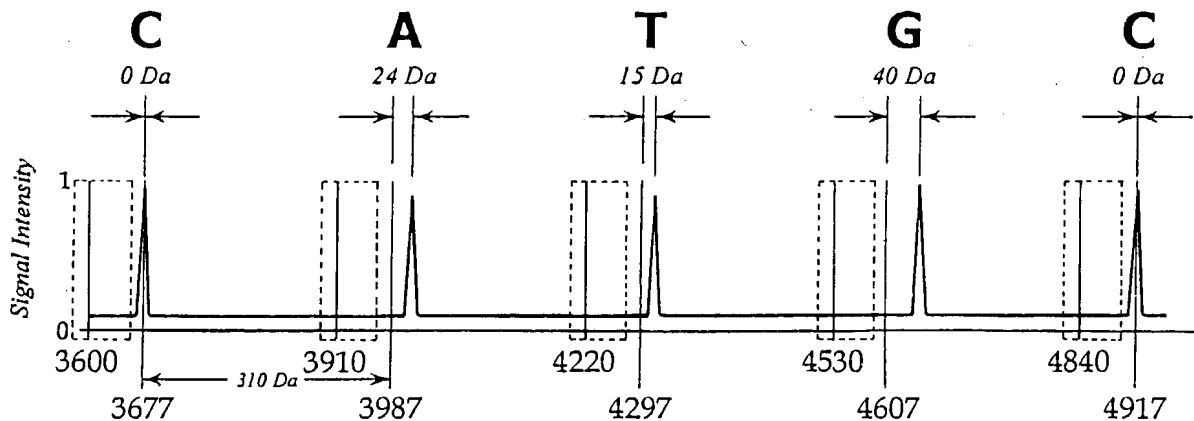
<u>Primer #1</u>	<u>Extension</u>	<u>Mass (Da)</u>
3327 Da	Products	
————	nnnng	4880
————	nnnt	4545
————	nna	4244
————	nc	3910
————	g	3640



Mass (daltons) FIG. 2a

Sequence #2: CATGC

<u>Primer #2</u>	<u>Extension</u>	<u>Mass (Da)</u>
3404 Da	Products	
————	nnnnc	4917
————	nnng	4647
————	nnt	4312
————	na	4011
————	c	3677



Mass (daltons) FIG. 2b



Sequence #1: GCATA

Primer #1 3327 Da	Extension Products	Mass (Da)
————	nnnna	4864
————	nnnt	4545
————	nna	4244
————	nc	3910
————	g	3640

Sequence #3: CATGC

Primer #3 3404 Da	Extension Products	Mass (Da)
————	nnnnc	4917
————	nnng	4647
————	nnt	4312
————	na	4011
————	c	3677

Sequence #2: TCAGG

Primer #2 3481 Da	Extension Products	Mass (Da)
————	nnnng	5034
————	nnng	4724
————	nna	4398
————	nc	4064
————	t	3769

Sequence #4: AACTC

Primer #4 3558 Da	Extension Products	Mass (Da)
————	nnnnc	5071
————	nnnt	4776
————	nnc	4451
————	na	4165
————	a	3855

Sequence

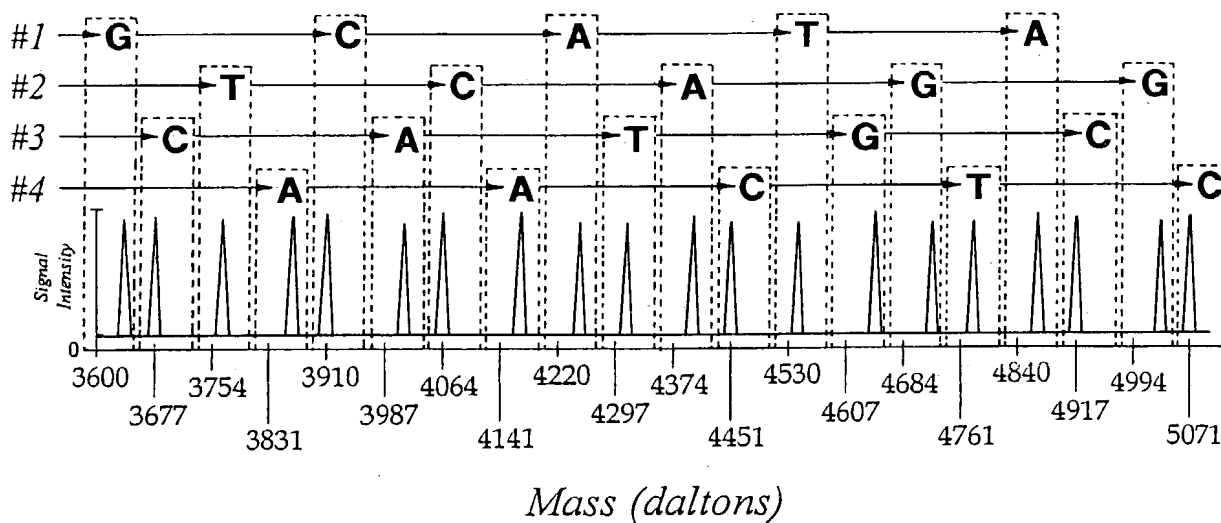
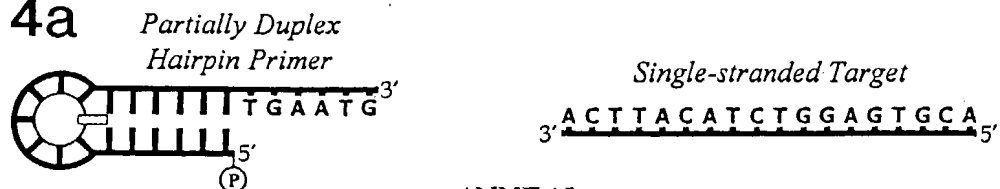


FIG. 3



FIG. 4a



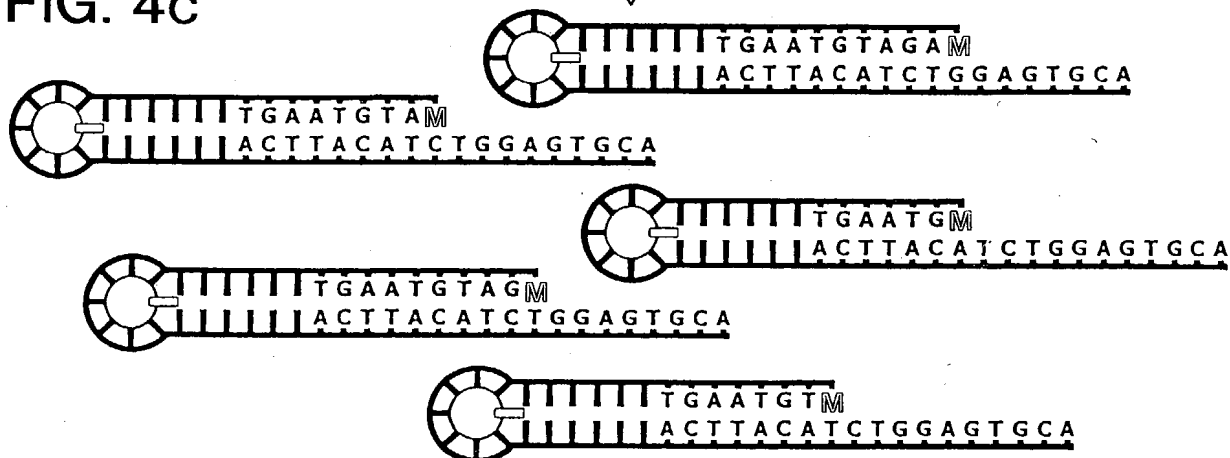
ANNEAL
LIGATE

FIG. 4b



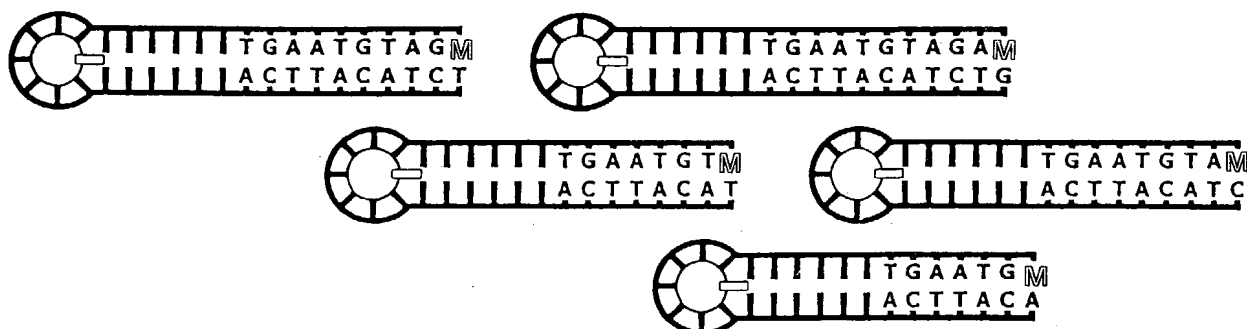
SEQUENCING REACTION
 with Mass-matched Terminators (M)

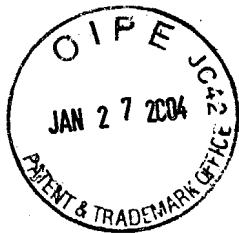
FIG. 4c



SINGLE STRAND-SPECIFIC
NUCLEASE

FIG. 4d





<i>Reaction Products</i>	<i>Mass (Da)</i>
	12868.6
	12227.2
	11594.8
	10992.4
	10384.0

FIG. 5a

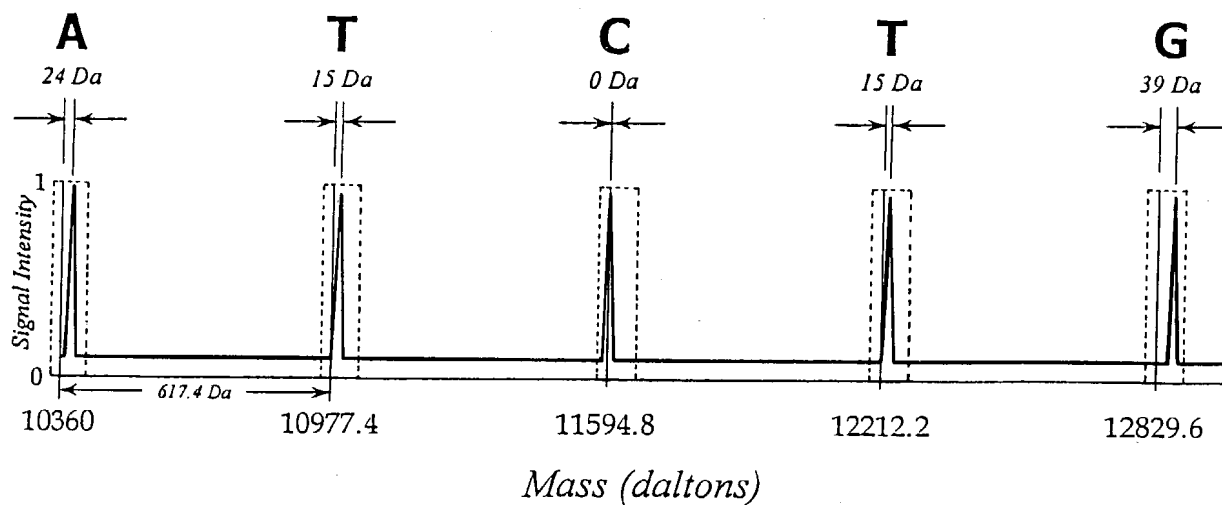
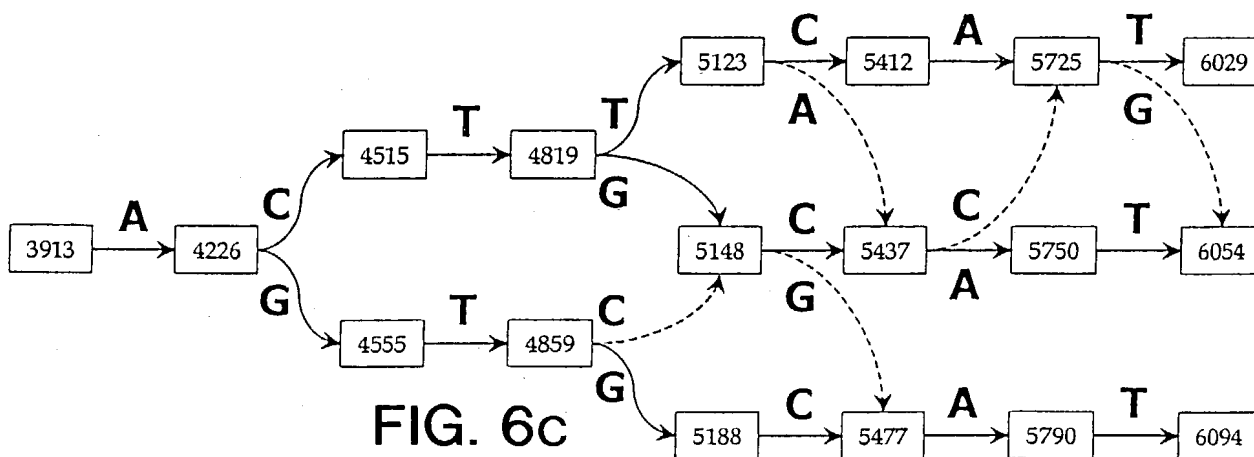
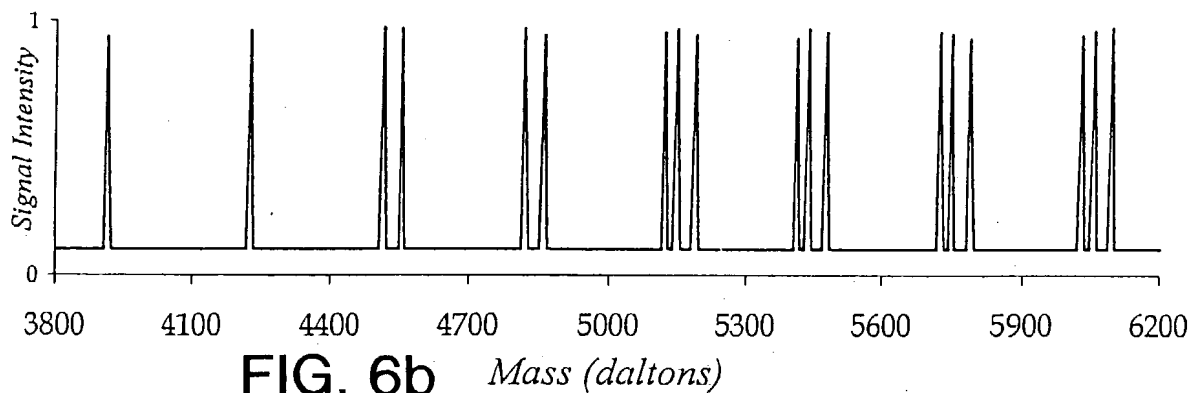


FIG. 5b



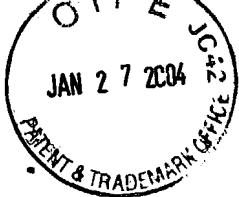
Variant #1: AACTGCAT			Variant #2: AACTTCAT			Variant #3: AAGTGCAT		
Primer	Extension Products	Mass (Da)	Primer	Extension Products	Mass (Da)	Primer	Extension Products	Mass (Da)
3616 Da	aactgcat	6054	3616 Da	aactccat	6029*	3616 Da	aagtgcac	6094**
	aactgca	5750		aactcca	5725*		aagtgcac	5790**
	aactgc	5437		aactcc	5412*		aagtgc	5477**
	aactg	5148		aactc	5123*		aagtgc	5188**
	aact	4819		aact	4819		aagt	4859**
	aac	4515		aac	4515		aag	4555**
	aa	4226		aa	4226		aa	4226
	a	3913		a	3913		a	3913

FIG. 6a



ACTGCAT actgccg actgcct actggat acttaat acttacg acttact
acttcag ACTTCAT agtccat agtcccg agtccct agtcgat AGTGCAT

FIG. 6d



Variant #1: AACTGCAT			Variant #2: AACTTCAT			Variant #3: AAGTGCAT		
Primer	Extension Products	Mass (Da)	Primer	Extension Products	Mass (Da)	Primer	Extension Products	Mass (Da)
3527 Da			3527 Da			3527 Da		
nnnnnnnt		5985	nnnnnnnt		5985	nnnnnnnt		5985
nnnnnna		5684	nnnnnna		5684	nnnnnna		5684
nnnnnc		5350	nnnnnc		5350	nnnnnc		5350
nnnng		5080	nnnnt		5055*	nnnng		5080
nnnt		4745	nnnt		4745	nnnt		4745
nnc		4420	nnc		4420	nng		4460**
na		4134	na		4134	na		4134
a		3824	a		3824	a		3824

FIG. 7a

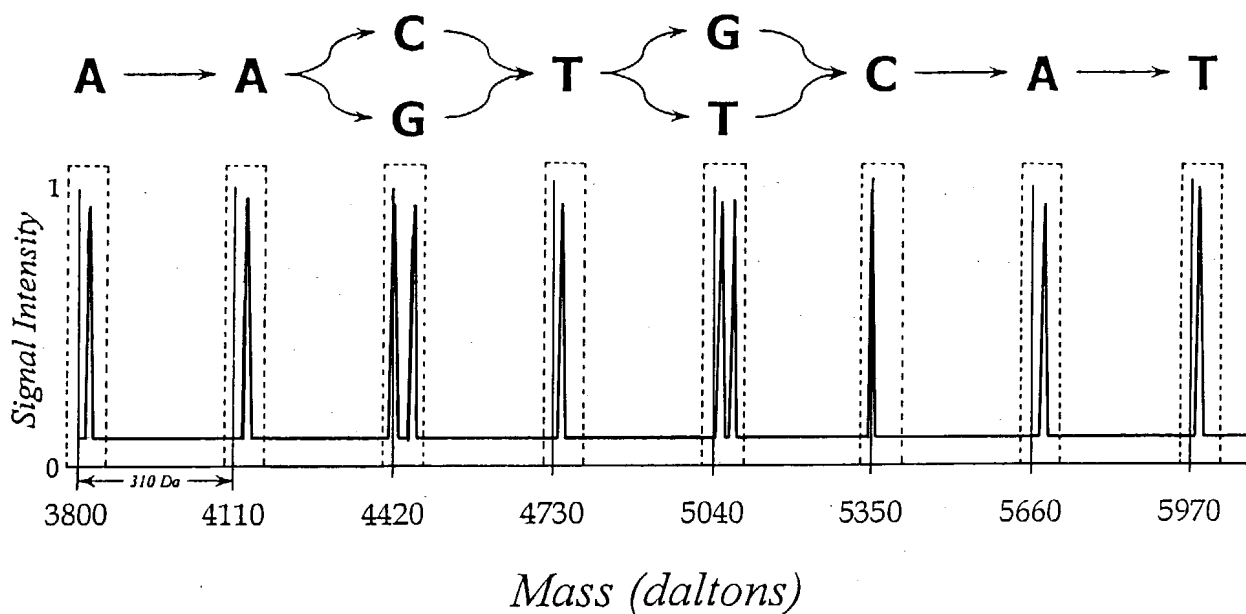


FIG. 7b

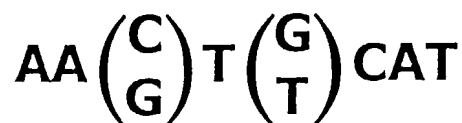


FIG. 7c

AACTGCAT
AACTTCAT
AAGTGCAT
aagttcat

FIG. 7d



Base composition density distributions for
7-mers using different nucleotide sets.

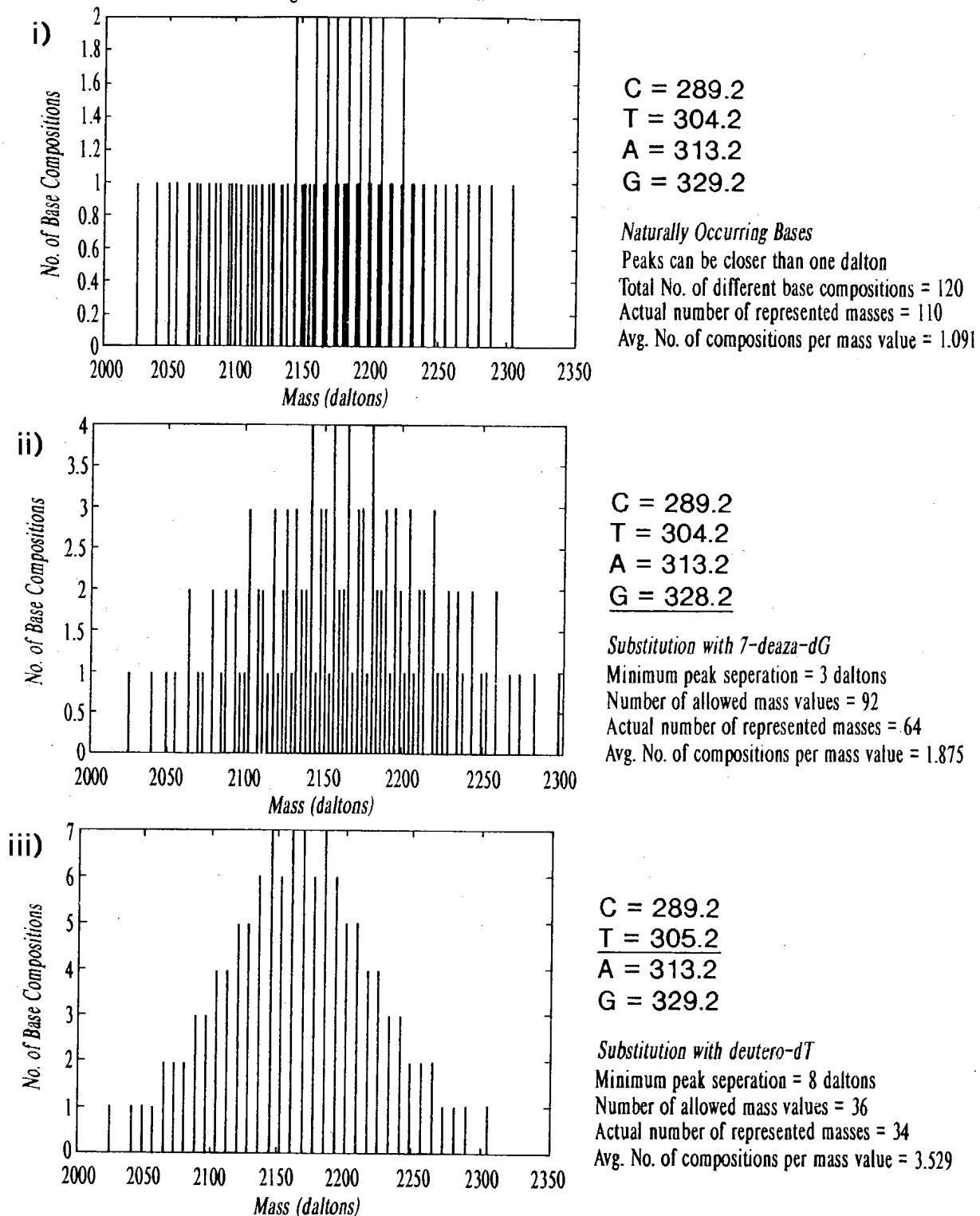


FIG. 8